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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,715	02/10/2004	Roy Gary Black	ISI 0402	3836
7590 H. Michael Brucker Suite 110 5855 Doyle Street Emeryville, CA 94608		10/11/2007	EXAMINER WENDELL, MARK R	
			ART UNIT 3635	PAPER NUMBER
			MAIL DATE 10/11/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/775,715

Applicant(s)

BLACK, ROY GARY

Examiner

Mark R. Wendell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 7-18, 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Hagaman (US 7073306). Regarding claim 1, Hagaman illustrates in Figures 1 and 2C an internal bracing system for a vertical wall (20) having straw bales (12) stacked in courses on a foundation wall (40) comprising:

- A plurality of vertically oriented spaced-apart bracing ladders (34) attached to the foundation wall (40) and rising vertically therefrom wherein some of the bales abut a said ladder and some of the bales are surrounded by a said ladder.

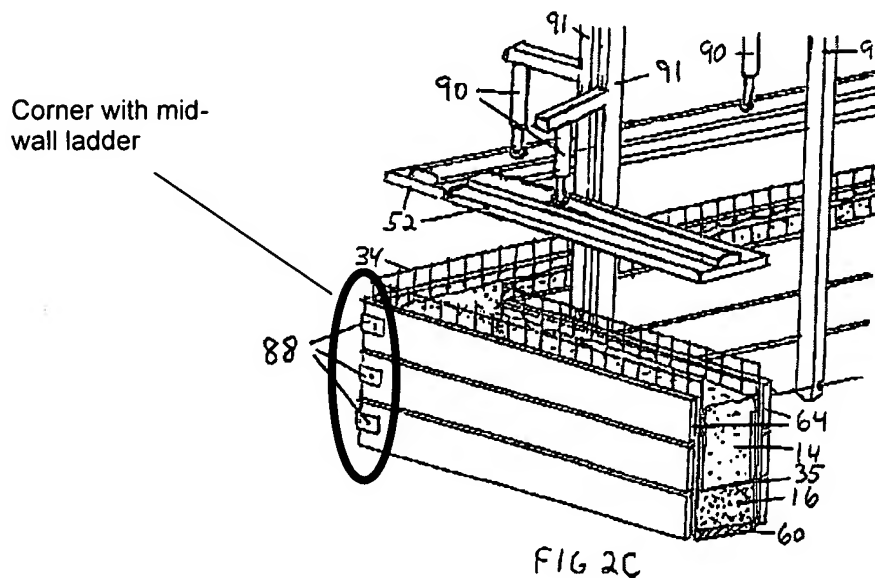
Regarding claim 2, Hagaman illustrates in Figure 1 the system of claim 1 wherein said ladders have bale windows (frame structure surrounding bale, 12) large enough to surround a straw bale.

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Regarding claim 3, Hagaman illustrates in Figure 2C the system of claim 2 wherein said ladders (34) further have bale abutments (52) between ladder windows which prevent a bale from passing through said ladder.

Regarding claim 4, Hagaman illustrates in Figure 2C the system of claim 3 wherein said ladder windows and ladder abutments (52) alternate vertically along the ladder (34) at intervals approximately equal to the height of a bale.

Regarding claims 7 and 8, Hagaman illustrates in Figure 2C the system of claim 4 wherein the vertical wall has comers and said ladders include mid-wall ladders, at right angles to each other, between the comers and corner ladders at the comers (See Figure below).



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Regarding claims 9 and 10, Hagaman illustrates in Figure 5B the ladders comprising two spaced apart rails (32A and 32B) connected by struts (22) with the spaces formed large enough to surround the bale (14).

Regarding claim 11, Hagaman illustrates in Figures 1 and 2C the system of claim 1 further comprising: X-shaped spars (30) sized to straddle a bale located remote from said bracing ladders (34) at the end of bales stacked on the foundation wall (40).

Regarding claim 12, Hagaman illustrates in Figure 1, 2C, and 7B The system of claim 11 wherein the bales, when stacked on the foundation wall, have a length measured along the length of the foundation, a height that measures the vertical dimension of the bales, and a width, and the foundation wall includes anchor dowels (42) affixed in the foundation wall (40) and extending vertically therefrom, wherein said X-shaped spars (30) comprise:

- An X-shaped core and a leg extending from each end of said X-shaped core wherein the distance between pairs of legs is greater than the width of a bale; and further comprising:
- A plurality of connecting rods (85), each extending vertically from and attached to an anchor dowel (42) and connected to a plurality of said X-shaped spar legs (30).

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Regarding claim 13, Hagaman illustrates in another embodiment in Figure 7A a stiffening truss ladder (31) meant to be disposed onto bales (12) and attached to bracing ladders (34).

Regarding claim 14, Hagaman illustrates in Figure 7A the stiffening ladder sized to pass through the bracing ladder window.

Regarding claim 15, Hagaman illustrates in Figures 1, 2C, and 7B a straw bale core wall with an internal bracing system comprising:

- A foundation wall (40) having a plurality of spaced-apart anchor dowel pairs (42) affixed to said foundation wall and extending generally vertically therefrom;
- A plurality of vertically oriented mid-wall bracing ladders (34) affixed to said foundation wall (40) at said anchor dowels and extending vertically to a height generally equal to the height of the wall; and
- A plurality of straw bales (12) stacked on said foundation wall (40) in a running bond, with some of said bales abutting said bracing ladders and other of said bales extending through said bracing ladders.

Regarding claim 16, Hagaman illustrates in Figure 1, the straw bale core wall with an internal bracing system of claim 15 wherein said bales have ends, further comprising:

- X-shaped spars (30), each having an X-shaped core and legs extending from the ends of said X-shaped core, disposed at the end of some of said bales (12), with

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said legs straddling bales above and below the bale where said X-shaped spar is disposed.

Regarding claim 17 Hagaman illustrates in Figure 1 and 7B the straw bale core wall with an internal bracing system of claim 16 wherein a plurality of said X-shaped spars (30) are aligned vertically with one of said anchor dowels (42) and further comprising a connecting rod (85) affixed to a said anchor dowel (42) and a plurality of said spars (83) vertically aligned with said anchor dowels. The examiner notes that the shape of the spar does not provide any additional or unexpected results that differ from the rectangular spar of Hagaman. The spar of Hagaman is functionally equivalent to the spar of the application.

Regarding claim 18, Hagaman illustrates all of the connecting rods (85) being affixed to all the spars (83).

Regarding claim 31, Hagaman illustrates in Figures 1 and 2C an internal bracing system for a vertical wall (20) having straw bales (12) stacked in courses on a foundation wall (40) comprising:

- A plurality of vertically oriented, spaced-apart bracing truss ladders (34) disposed externally of the bales and attached to the foundation wall (40) and rising vertically therefrom wherein some of the bales abut a said ladder and some of the bales are surrounded by a said ladder.

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 19-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagaman (US 7073306). It is described above what is disclosed by Hagaman.

Concerning claims 19-30, the claimed method steps are rendered obvious since such would be logical manner of using, or constructing, the apparatus.

Regarding claim 5, Hagaman discloses the claimed invention except for making the ladders from rebar. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use rebar for the ladders, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice (In re Leshin, 125 USPQ 416). The examiner notes that it is well known that the use of rebar, as opposed to other materials provides additional strength to a standing structure or foundation.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hagaman (US 7073306) in view of Allen (US 6041566). It is described above what is disclosed by



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Hagaman. However, Hagaman does not teach the space between ladders and the foundation wall to be approximately equal to three bale lengths. Allen illustrates in Figure 2 the distance between ladders and foundation to be approximately three bale lengths. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the structure of Hagaman with the space requirement of Allen in order to keep the bales off of the foundation in order to not have the bales sit in a puddle of water when the bales got wet. The space would allow for the bales to drain and keep them from sitting in their own puddle of water, thus allowing for them to dry quicker.

### ***Response to Arguments***

Applicant's arguments see correspondence filed 9/7/2007, with respect to the rejections of claims 1-30 under 102(b) and 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of Hagaman (US 7073306) and Allen (US 6041566). The examiner notes that the majority of applicant's argument is based upon the idea that Allen's invention does not stand vertically. However, the examiner argues that the original claims did not positively claim the structure as being vertically oriented, only rising vertically. The prior art did, in the original case, rise in the vertical direction. However, in response to the amended claims, the Examiner has found new prior art in the form of Hagaman.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Wendell whose telephone number is (571) 270-3245. The examiner can normally be reached on Mon-Fri, 7:30AM-5PM, Alt. Fri off, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571) 272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Richard Chilcot  
Supervisory Patent Examiner  
Art Unit 3635

MRW  
October 5, 2007